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Trustees for Natural Resources Injured by the Command Oil Spill

Dear Trustees,

I am writing to provide additional information in support of the Brown Pelican roost enhancement and protection project at the Moss Landing Wildlife Area.

Moss Landing Wildlife Area consists of about 150 acres of retired salt ponds near the entrance of Elkhorn Slough, Monterey County. The ponds were purchased by the California Department of Fish and Game (DFG) in 1984 and converted to managed ponds for wildlife between 1989 and 1991. DFG's restoration goals were to provide nesting habitat for Snowy Plovers and roosting habitat for Brown Pelicans. An island was constructed in one of the ponds for the pelicans. It was intended that water would be moved through a water control structure from Elkhorn Slough into a holding channel. From the holding channel water would be moved through a series of ponds including the one containing the island.

The managed ponds have never functioned as intended because it has not been possible to move water into the ponds easily. Water can only be put into the holding channel on the highest tides and it is not possible to get water into some of the outer ponds at all. Also, it has not been possible to surround the island with water in late summer and fall when pelicans would be expected to roost there.

Since 1995 PRBO biologists have been managing the ponds for nesting Snowy Plovers. By trapping water in the holding channel during the highest tides and then metering the water into burrow ditches (excavated in ponds to create the levees) it has been possible to enable plovers to nest in the dry pond bottoms then move their chicks to the water-filled burrow ditches to feed.

The ponds have been a productive breeding area for Snowy Plovers since PRBO began managing water for plovers. From 1995 through 2002, on average, 48% (SD = 17.4%) of all fledged chicks (hatched chicks reaching flying age) from the Monterey Bay shoreline were from the managed ponds (Table 1). Since 1999, 35-48 males and 30-45 females have breed in the salt ponds annually. The largest numbers (48 males and 45 females) nested in 2002.

Brown Pelicans also roost in the ponds. Although Brown Pelicans have never used the island, PRBO biologist learned that when ponds were very shallowly flooded they

attracted large numbers of roosting pelicans, particularly at dusk. They estimated up to 3,000 pelicans roosting in shallow water ponds. Thus by providing shallowly flooded habitat in some ponds it is possible to establish a large pelican roost in the wildlife area.

Table 1. Percent of fledged young from the shoreline of Monterey Bay reared by Snowy Plovers nesting in the managed ponds from 1995 to 2002.

Year	% Fledglings From Ponds	Total Number of Fledglings
1995	25.0	108
1996	46.1	128
1997	59.4	138
1998	57.1	133
1999	80.0	85
2000	47.2	142
2001	34.3	265
2002	34.6	211

It has never been possible to manage the ponds as originally planned because of the high elevations of the pond bottoms relative to sea level. Additionally, the original water control structures have corroded and now leak badly. Vegetation is evading the outermost ponds making them unusable by Snowy Plovers and other shorebirds. The bank of the slough near the main levee has eroded badly. If it is not fortified it will continue to erode until the main pond levee is undercut causing the area to become tidal.

Ducks Unlimited, DFG and PRBO are collaborating on a proposal to restore the ponds so that they can be managed more effectively for nesting Snowy Plovers, roosting Brown Pelicans, and other aquatic birds such as migrating and wintering shorebirds and waterfowl.

The draft restoration plan (see attachment Moss Landing Salt Ponds Habitat Enhancement Plan) proposes to expand the holding channel and replace failing water control structures. Additional water control structures are to be added so that water levels in each pond can be managed independently. The main levee will be reinforced to maintain the integrity of the managed pond system. It is estimated to cost about $750,000 for the structural changes.

The Wildlife Conservation Board (WCB) has committed $650,000 and the National Fish and Wildlife Foundation (NFWF) $100,000 for the project. DFG and Ducks Unlimited are commencing on the permitting process. Some NFWF funds can be used for permitting, expected to be facilitated through a contract with a consulting company with expertise in the NEPA and CEQA process.

The project addresses two major goals of the trustees. It aims to provide roosting habitat for thousands of Brown Pelicans, one of the species impacted by the Command Spill. Secondly, by providing high quality nesting habitat for the Snowy Plover it increases

opportunities for the public to use Monterey Beaches because it reduces the dependency of the plovers on the beaches. Several portions of Monterey Bay beaches have been closed to the public during the plovers nesting season to reduce the impact of human recreation on nesting success. The salt ponds are already closed to the public and support substantial numbers of nesting plovers. Maintaining the ponds as productive plover nesting habitat will reduce the need for further beach closure.

Beside the plovers and pelicans, the ponds should benefit nesting avocets and stilts, and provide winter habitat for other shorebirds and waterfowl. Even under current circumstances we have shown the ponds can be a valuable plover nesting area and an important pelican roost. Restoration of the ponds should insure that these benefits persist for a long time. Appropriate permits will be obtained to make certain the project complies with applicable laws. We are unaware of any public health and safety issues associated with the proposed project.

After the ponds are restored it will be necessary to manage water levels and other pond attributes year round and to monitor the response of all target species to maximize the benefits for all species. Some of the key management activities are:

- Maintain water year round in cells with too much vegetative growth to kill back the vegetation.
- Draw water down in one or more cells in April for Snowy Plover nesting. Let other cells dry up naturally.
- Maintain shallow water areas in channels as foraging areas for adult and chick Snowy Plovers during summer.
- Maintain water in the reservoir cell throughout the summer so that it is available for metering into the cell channels during the summer.
- Flood all cells in August when Snowy Plovers finish nesting and maintain them in a flooded condition until the following spring.
- Maintain shallowly flooded areas for roosting Brown Pelicans.
- Counter the effect of winter storms by lowering water levels when necessary to prevent levee erosion.
- Control weedy levee vegetation.
- Create micro topographic relief in pond bottoms for nesting plovers.

Currently DFG allows PRBO biologists to manage the ponds for nesting Snowy Plovers during the summer. Monitoring the plovers' response to the management actions involves finding nests and maintaining a color banded population of plovers. PRBO biologists document the number of nesting adults, number of nests, number of successful nests, causes of nest failure, number of chicks hatched, and number of chicks fledged. PRBO employs one biologist from March through September to conduct these activities. PRBO biologists do not currently closely monitor most other wildlife using the ponds, except those species that might impact nesting plovers.

The Trustees could enhance the restoration project by adding a management and monitoring component for the initial years after the restoration project is completed to

maximize the effectiveness of management actions on Brown Pelicans and other migrating and wintering waterbirds. For monitoring pelicans, Deborah Jaques (pers. comm.) suggested year-round surveys with an emphasis on summer and fall. Surveys should be conducted during both daytime and nighttime and include data on number of birds, cells selected for roosting, and water depth of the roost sites.

The managed ponds should also support a wide variety of other aquatic birds, especially wintering shorebirds and waterfowl. These should be monitored from fall through spring, twice per month on both a high and a low tide to determine how management for these species could be best integrated with management for plovers and pelicans. Data collected would include: species, numbers, location (between cells), behavior (roosting versus feeding), water level, and salinity.

The monitoring program would extend for three years following restoration of the ponds with the goal of developing long term management practices to effectively integrate pond use by nesting Snowy Plovers, roosting Brown Pelicans, and migrating and wintering shorebirds and waterfowl.

I suggest $50,000 per year for three years (total = $150,000) primarily to cover a half time position for a person to manage the ponds and monitor wildlife, particularly in fall and winter after plover nesting. Included within the $50,000 would be a small budget of $5,000- $10,000 for equipment purchase and rental.

Contacts for the project are:

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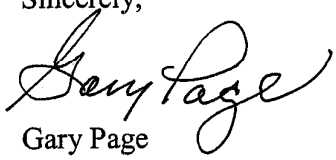
Sincerely,



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